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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,798	10/17/2003	Wayne Debord	3302	9700
39510	7590	07/07/2005	EXAMINER	
HOLLAND & MIDGLEY, LLP			NGUYEN, HUNG T	
P.O. BOX 1840				
BOISE, ID 83701-1840			ART UNIT	PAPER NUMBER
			2636	

DATE MAILED: 07/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/688,798

Applicant(s)

DEBORD ET AL.

Examiner

Hung T. Nguyen

Art Unit

2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothschild et al. (U.S. 5,802,015) in view of Medin (U.S. 5,442,669).

Regarding claim 1, Rothschild discloses an electronic timing label device (10) for monitoring and alerting (14) persons to the spoilage of perishable products (11) [ figs.1,4-6, col.1, lines 5-8, col.4, lines 7-20, col.4, lines 51-66 and abstract ] comprising:

- a timer chip (40) / timer clock counter (26) [ fig.6, col.3, lines 15-37, col.4, lines 11-15, col.6, lines 55-61 and col.7, lines 22-37 ];
- a battery (19) [ fig.6, col.3, lines 45-47, col.6, lines 51-55 ];
- an electronic monitoring or timing circuit / a timer chip (40) / timer clock counter (26) [ fig.6, col.3, lines 15-37, col.4, lines 11-15, col.6, lines 55-61 and col.7, lines 22-37 ];
- a circuit board (20) [ figs.3-4,7, col.5, lines 18-29 ]
- an indicator / LED or liquid crystal display (14) is connected to the circuit (20) the battery (19) and timer chip (40), clock counter (26) to provide the alarm signal to the users or consumers [ figs.1,3-4,6, col.3, lines 30-59, col.4, lines 7-20, col.4, lines 51-66 and abstract ].

Art Unit: 2636

Although, the reference of Rothschild does not specifically mention time bases is a temperature as claimed by the applicant.

Furthermore, Medin teaches a perishable good integrity indicator includes a second oscillator (15) outputs a second clock temperature which varies as a function of temperature and measuring historical time temperature relationships and displaying a remaining product shelf life, integrity and a product spoilage index at any point of time [ 1,3, col.2, lines 14-28, col.3, lines 24-32, col.4, lines 16-27, col.8, lines 48 to col.9, line 10 ].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Medin in the system of Rothschild for detecting the time temperature of the food products are over limit and indicating the spoilage of perishable foods / drugs.

Regarding claim 2, Rothschild discloses an electronic timing **label device (10)** for monitoring and alerting (14) persons to the spoilage of perishable products / drug bottle (11) [ figs.1,4-6, col.1, lines 5-8, col.4, lines 7-20; col.4, lines 51-66 and abstract ].

Regarding claim 3, Medin teaches the perishable good integrity indicator includes a second oscillator (15) outputs a second clock temperature which **varies as a function of temperature** and measuring historical time temperature relationships and displaying a remaining product shelf life, integrity and a product spoilage index at any point of time [ 1,3, col.2, lines 14-28, col.3, lines 24-32, col.4, lines 16-27, col.8, lines 48 to col.9, line 10 ].

Art Unit: 2636

Regarding claims 4-6, Medin teaches the perishable good integrity indicator includes a second oscillator (15) outputs a second clock temperature which **varies as a function of temperature** and measuring historical time temperature relationships and displaying a remaining product shelf life, integrity and a product spoilage index at any point of time and **the frequency can be set / programmed by a user** / a desired time temperature application [ figs.1,3, col.1, lines 45-68, col.6, lines 49-68, col.8, lines 48 to col.9, line 10 ].

Regarding claims 7-9, Medin teaches the perishable good integrity indicator includes a second oscillator (15) outputs a second clock temperature which **varies as a function of temperature** and measuring historical time temperature relationships and displaying a remaining product shelf life, integrity and a product spoilage index at any point of time and **the temperature variable oscillator** [ figs.1,3, col.1, lines 45-68, col.6, lines 49-68, col.8, lines 48 to col.9, line 10 ] without mention type of resonance circuit as claimed by the applicant because that is an obvious design choice of the skilled artisan.

Furthermore, Rothschild discloses the electronic timing label device (10) for monitoring and alerting (14) persons to the spoilage of perishable products (11) [ figs.1,4-6, col.1, lines 5-8, col.4, lines 7-20, col.4, lines 51-66 and abstract ] comprising:

the indicator / LED or liquid crystal display (14) is connected to the circuit (20) the battery (19) and timer chip (40), clock counter (26) to provide the alarm signal to the users or consumers includes the circuit of resonance (RC circuit) [ figs.3,6, col.5, lines 34-42 and col.6, lines 3-9 and col.6, line 60 to col.7, line 5 ].

Art Unit: 2636

Regarding claim 10, Rothschild discloses the indicator (14) is an audible / horn is connected to the circuit (20) the battery (19) and timer chip (40), clock counter (26) to provide the alarm signal to the users or consumers [ col.9, lines 45-49 ].

Regarding claim 11, Medin teaches the perishable good integrity indicator includes a second oscillator (15) outputs a second clock temperature which **varies as a function of temperature** and measuring historical time temperature relationships and displaying a remaining product shelf life, integrity and a product spoilage index at any point of time and **the frequency can be set / programmed by a user** / a desired time temperature application [ figs.1,3, col.1, lines 45-68, col.6, lines 49-68, col.8, lines 48 to col.9, line 10 ].

Regarding claims 12-13, Rothschild discloses an electronic timing label device (10) is an integrated circuit / **ASIC** which may programmed data information for monitoring and alerting (14) persons to the spoilage of perishable products / drug bottle (11) [ figs5-6, col.6, lines 2-48, and acol.9, line 50 to col.10, line 54 ].

Regarding claims 14-15, Rothschild discloses the indicator / LED or liquid crystal display (14) is connected to the circuit (20) the battery (19) and timer chip (40), clock counter (26) to provide the alarm signal to the users or consumers [ figs.1,3-4,6, col.3, lines 30-59, col.4, lines 7-20, col.4, lines 51-66 and abstract ].

Art Unit: 2636

Regarding claim 16, Rothschild discloses an electronic timing label device (10) for monitoring and alerting (14) persons to the spoilage of perishable products (11) [ figs.1,4-6, col.1, lines 5-8, col.4, lines 7-20, col.4, lines 51-66 and abstract ] comprising:

- a timer chip (40) / timer clock counter (26) [ fig.6, col.3, lines 15-37, col.4, lines 11-15, col.6, lines 55-61 and col.7, lines 22-37 ];
- a battery (19) [ fig.6, col.3, lines 45-47, col.6, lines 51-55 ];
- an electronic monitoring or timing circuit / a timer chip (40) / timer clock counter (26) [ fig.6, col.3, lines 15-37, col.4, lines 11-15, col.6, lines 55-61 and col.7, lines 22-37 ];
- a circuit board (20) [ figs.3-4,7, col.5, lines 18-29 ]
- an indicator / LED or liquid crystal display (14) is connected to the circuit (20) the battery (19) and timer chip (40), clock counter (26) to provide the alarm signal to the users or consumers [ figs.1,3-4,6, col.3, lines 30-59, col.4, lines 7-20, col.4, lines 51-66 and abstract ].

Although, the reference of Rothschild does not specifically mention time bases is a temperature as claimed by the applicant.

Furthermore, Medin teaches a perishable good integrity indicator includes a second oscillator (15) outputs a second clock temperature which varies as a function of temperature and measuring historical time temperature relationships and displaying a remaining product shelf life, integrity and a product spoilage index at any point of time [ 1,3, col.2, lines 14-28, col.3, lines 24-32, col.4, lines 16-27, col.8, lines 48 to col.9, line 10 ].

Art Unit: 2636

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Medin in the system of Rothschild for detecting the time temperature of the food products are over limit and indicating the spoilage of perishable foods / drugs.

Regarding claim 17, Medin teaches the perishable good integrity indicator includes a second oscillator (15) outputs a second clock temperature which **varies as a function of temperature** and measuring historical time temperature relationships and displaying a remaining product shelf life, integrity and a product spoilage index at any point of time [ 1,3, col.2, lines 14-28, col.3, lines 24-32, col.4, lines 16-27, col.8, lines 48 to col.9, line 10 ].

Regarding claims 18-20, Medin teaches the perishable good integrity indicator includes a second oscillator (15) outputs a second clock temperature which **varies as a function of temperature** and measuring historical time temperature relationships and displaying a remaining product shelf life, integrity and a product spoilage index at any point of time and **the frequency can be set / programmed by a user** / a desired time temperature application [ figs.1,3, col.1, lines 45-68, col.6, lines 49-68, col.8, lines 48 to col.9, line 10 ].

Regarding claims 21-23, Medin teaches the perishable good integrity indicator includes a second oscillator (15) outputs a second clock temperature which **varies as a function of temperature** and measuring historical time temperature relationships and displaying a remaining product shelf life, integrity and a product spoilage index at any point of time and **the temperature variable oscillator** [ figs.1,3, col.1, lines 45-68, col.6, lines 49-68, col.8, lines 48 to col.9, line 10 ]



Art Unit: 2636

without mention type of resonance circuit as claimed by the applicant because that is an obvious design choice of the skilled artisan.

Furthermore, Rothschild discloses the electronic timing label device (10) for monitoring and alerting (14) persons to the spoilage of perishable products (11) [ figs.1,4-6, col.1, lines 5-8, col.4, lines 7-20, col.4, lines 51-66 and abstract ] comprising:  
the indicator / LED or liquid crystal display (14) is connected to the circuit (20) the battery (19) and timer chip (40), clock counter (26) to provide the alarm signal to the users or consumers includes the circuit of resonance (RC circuit) [ figs.3,6, col.5, lines 34-42 and col.6, lines 3-9 and col.6, line 60 to col.7, line 5 ].

Regarding claim 24, Rothschild discloses the indicator (14) is an audible / horn is connected to the circuit (20) the battery (19) and timer chip (40), clock counter (26) to provide the alarm signal to the users or consumers [ col.9, lines 45-49 ].

Regarding claim 25, Medin teaches the perishable good integrity indicator includes a second oscillator (15) outputs a second clock temperature which **varies as a function of temperature** and measuring historical time temperature relationships and displaying a remaining product shelf life, integrity and a product spoilage index at any point of time and **the frequency can be set / programmed by a user** / a desired time temperature application [ figs.1,3, col.1, lines 45-68, col.6, lines 49-68, col.8, lines 48 to col.9, line 10 ].

Art Unit: 2636

Regarding claims 26-27, Rothschild discloses the electronic timing **label device (10)** is an integrated circuit / **ASIC** which may programmed data information for monitoring and alerting (14) persons to the spoilage of perishable products / drug bottle (11) [ figs5-6, col.6, lines 2-48, and acol.9, line 50 to col.10, line 54 ].

Regarding claims 28-29, Rothschild discloses the indicator / LED or liquid crystal display (14) is connected to the circuit (20) the battery (19) and timer chip (40), clock counter (26) to provide the alarm signal to the users or consumers [ figs.1,3-4,6, col.3, lines 30-59, col.4, lines 7-20, col.4, lines 51-66 and abstract ].

Regarding claims 30 & 42, Rothschild discloses an electronic timing device (10) for monitoring and alerting (14) persons to the spoilage of perishable products (11) [ figs.1,4-6, col.1, lines 5-8, col.4, lines 7-20, col.4, lines 51-66 and abstract ] comprising:

- a timer chip (40) / timer clock counter (26) [ fig.6, col.3, lines 15-37, col.4, lines 11-15, col.6, lines 55-61 and col.7, lines 22-37 ];
- a battery (19) [ fig.6, col.3, lines 45-47, col.6, lines 51-55 ];
- an electronic monitoring or timing circuit / a timer chip (40) / timer clock counter (26) [ fig.6, col.3, lines 15-37, col.4, lines 11-15, col.6, lines 55-61 and col.7, lines 22-37 ];
- a circuit board (20) [ figs.3-4,7, col.5, lines 18-29 ]

Art Unit: 2636

- an indicator / LED or liquid crystal display (14) is connected to the circuit (20) the battery (19) and timer chip (40), clock counter (26) to provide the alarm signal to the users or consumers [ figs.1,3-4,6, col.3, lines 30-59, col.4, lines 7-20, col.4, lines 51-66 and abstract ].

Although, the reference of Rothschild does not specifically mention time bases is a temperature as claimed by the applicant.

Furthermore, Medin teaches a perishable good integrity indicator includes a second oscillator (15) outputs a second clock temperature which varies as a function of temperature and measuring historical time temperature relationships and displaying a remaining product shelf life, integrity and a product spoilage index at any point of time [ 1,3, col.2, lines 14-28, col.3, lines 24-32, col.4, lines 16-27, col.8, lines 48 to col.9, line 10 ].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Medin in the system of Rothschild for detecting the time temperature of the food products are over limit and indicating the spoilage of perishable foods / drugs.

Regarding claims 31-32, Medin teaches the perishable good integrity indicator includes a second oscillator (15) outputs a second clock temperature which **varies as a function of temperature** and measuring historical time temperature relationships and displaying a remaining product shelf life, integrity and a product spoilage index at any point of time and **the frequency can be set / programmed by a user** / a desired time temperature application [ figs.1,3, col.1, lines 45-68, col.6, lines 49-68, col.8, lines 48 to col.9, line 10 ].

Art Unit: 2636

Regarding claims 33-35, Medin teaches the perishable good integrity indicator includes a second oscillator (15) outputs a second clock temperature which **varies as a function of temperature** and measuring historical time temperature relationships and displaying a remaining product shelf life, integrity and a product spoilage index at any point of time and **the temperature variable oscillator** [ figs.1,3, col.1, lines 45-68, col.6, lines 49-68, col.8, lines 48 to col.9, line 10 ] without mention type of resonance circuit as claimed by the applicant because that is an obvious design choice of the skilled artisan.

Furthermore, Rothschild discloses the electronic timing label device (10) for monitoring and alerting (14) persons to the spoilage of perishable products (11) [ figs.1,4-6, col.1, lines 5-8, col.4, lines 7-20, col.4, lines 51-66 and abstract ] comprising:  
the indicator / LED or liquid crystal display (14) is connected to the circuit (20) the battery (19) and timer chip (40), clock counter (26) to provide the alarm signal to the users or consumers includes the circuit of resonance (RC circuit) [ figs.3,6, col.5, lines 34-42 and col.6, lines 3-9 and col.6, line 60 to col.7, line 5 ].

Regarding claim 36, Rothschild discloses the indicator (14) is an audible / horn is connected to the circuit (20) the battery (19) and timer chip (40), clock counter (26) to provide the alarm signal to the users or consumers [ col.9, lines 45-49 ].

Regarding claim 37, Medin teaches the perishable good integrity indicator includes a second oscillator (15) outputs a second clock temperature which **varies as a function of temperature** and measuring historical time temperature relationships and displaying a remaining product shelf

Art Unit: 2636

life, integrity and a product spoilage index at any point of time and **the frequency can be set / programmed by a user** / a desired time temperature application [ figs.1,3, col.1, lines 45-68, col.6, lines 49-68, col.8, lines 48 to col.9, line 10 ].

Regarding claims 38-39, Rothschild discloses the electronic timing device (10) is an integrated circuit / **ASIC** which may programmed data information for monitoring and alerting (14) persons to the spoilage of perishable products / drug bottle (11) [ figs5-6, col.6, lines 2-48, and acol.9, line 50 to col.10, line 54 ].

Regarding claims 40-41, Rothschild discloses the indicator / LED or liquid crystal display (14) is connected to the circuit (20) the battery (19) and timer chip (40), clock counter (26) to provide the alarm signal to the users or consumers [ figs.1,3-4,6, col.3, lines 30-59, col.4, lines 7-20, col.4, lines 51-66 and abstract ].

### **Conclusion**

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Suzuki (U.S. 5,835,553) Semiconductor integrated circuit having a digital temperature sensor circuit.
- Quine (U.S. 6,795,376) Method for displaying an environmentally modulated expiration date.

Art Unit: 2636

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung T. Nguyen whose telephone number is (571) 272-2982. The examiner can normally be reached on Monday to Friday from 8:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hofsass, Jeffery can be reached on (571) 272-2981. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

**HUNG NGUYEN  
PRIMARY EXAMINER**

A handwritten signature in cursive script that reads "Hung Nguyen".

Examiner: Hung T. Nguyen

Date: June 30, 2005